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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/581,329 | 06/08/2000 | JEAN MORAND | 39417/DBP | 6928 |

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EXAMINER

KNABLE, GEOFFREY L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1733

DATE MAILED: 08/27/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 09/581,329 | Applicant(s) MORAND ET AL. | |
| | Examiner Geoffrey L. Knable | Art Unit 1733 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 6, 2003 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The previous rejection with respect to how the conductor is loosely fixed with overcasting/tacking has been withdrawn. The rejection concerning what was meant by fastening the free ends of the preform however will be maintained in light of some continuing confusion presented by applicant's response to this rejection. In particular, applicant explains that in some manufacturing processes, some preform components such as a rubber underlayer may have free ends linked together. It is then urged that "[a]pplicants did not imply that the radial carcass ply 3 is linked at its free ends. Such a ply would be wound on the underlayers as in conventional tire manufacturing, and the assembly would be stretched "in an outward radial direction". In light of this argument, the examiner is having extreme difficulty understanding exactly what is applicant's

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position with respect to the meaning of fastening the free ends and squaring this with conventional tire building. First, it is believed important to clarify the examiner's understanding of normal and conventional tire building to which it was believed this invention was directed. In particular, radial tires are normally and typically built by applying successive layers/plies (e.g. the inner liner followed by the carcass plies) to a cylindrical tire building drum with a splice or joint being formed between the free ends of each successive component (these of course still being green or uncured components at this stage, the ends being typically held together by the green tack of the rubber). Other elements (beads, sidewalls, etc.) are also applied followed by toroidal shaping from a cylindrical to a toroidal shape and joining with the belt/tread (followed by molding). With respect to applicants arguments in particular, it would seem that applicant is first urging that some separately formed tire components such as the tire underlayer (presumably the tire innerliner) have their free ends fastened apparently off the drum. If so, such an embodiment would not seem to be consistent with claim 16 which seems to require that the free ends be linked while the preform is on the support (i.e. the building drum) as typical. The statement that the carcass free ends are not linked is particularly confusing. It seems to be applicant's argument that the innerliner has its ends linked but not the carcass plies – this is not understood and again provides significant confusion for the artisan trying to understand what is meant by linking the free ends. Again, it was assumed that this simply was referring to the normal and typical joining of the ends of almost all strip applied tire components. From applicant's argument, it is apparent that this is not the case. It therefore is again not clear what is

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meant by fastening the free ends and it is submitted that the artisan would not be able to practice the apparently intended invention as it apparently is intended to reflect some atypical tire building technique. Clarification is required.

3. Claims 6-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 still defines a "*method* of modifying a *process* for manufacturing a tire", this being followed by defining the *process* as "using an assembly" and then defining what the *process* comprises followed by defining steps of the *method*. It however is not clear from this language exactly what the scope of protection afforded by this claim is. The particular use of both "method" and "process," each comprising certain steps, presenting particular confusion in determining exactly what steps form positive required steps within the claimed method. Are the "process" steps required in the "method"? Does this claim require manufacturing a tire? Clarification is required, it being suggested that the claim be reformed to simply define single method (e.g. "method of manufacturing a tire", or perhaps Jepson type format "In a method of manufacturing a tire..., the improvement comprising..) rather than a method of modifying a process so as to more clearly set forth the metes and bounds of protection afforded by this claim.

Claims 16 and 25 each define that the conductor path extends "across" or "over" or "along" a length and width of the preform or the tire. In light of applicant's arguments, the scope of this language is still considered to be indefinite. In particular, from applicant's arguments, it again seems that it is being urged that this language defines

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over references showing the conductor in the lateral sides of a tire, it being urged that the claims require that the conductor be in the "periphery" or presumably the tread area of the tire. It however is not seen how the language can be read to require this.

Applicant further urges in response to this rejection that "applicant did not intend to suggest that "the conductor must extend from bead to bead across the entire tire.""

From this argument, it would appear that applicant is reading this language as defining in essence the direction of extent of the conductor, not the actual magnitude of that extent. If so, then what in claim 16 in any way defines that the loop extends along the tire periphery ((i.e. apparently the tread region) as opposed to for example the sides.

The scope of protection afforded by this language thus remains indefinite and confusing.

Along these same lines, it would seem from some of applicant's arguments with respect to the art rejections that defining that the preform is a "complementary preform" apparently defines some important relationship between the preforms that defines over the prior art. Since significance is now being asserted for this term, clarification is required of exactly what is meant by this term in the context of the present invention.

Does this require that the preform be the same size/shape as the innerliner/carcass?

The examiner read this as simply defining that the generally rectangular complementary preform also simply generally has its long dimension in the circumferential tire direction the same as the innerliner and carcass, not that it is for example the same size or width.

As it would seem some other meaning is being attributed to this term, an ambiguity is raised for which clarification is required.

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In claim 16, it is still not considered that the scope of protection afforded by defining that the conductor is fixed "in a loose manner" can be adequately and readily ascertained. Although upon further review, the 35 USC 112, first paragraph rejection with respect to the related enablement issue has been withdrawn with this office action, it is still not considered that simply defining conductors fixed in a "loose manner", without some additional indication of at least what this loose connection allows the conductors to do, provides a sufficient indication of the scope of the claims. In other words, without some further definition of this, it is not considered that the artisan is reasonably apprised of the scope of what is and is not a "loose" connection, the claim being therefore indefinite in this regard without more. Additionally, it is not clear if this reference to the conductors being fixed in a loose manner additionally requires or defines that the conductor also in some way follows some sort of sinuous path (e.g. fig. 4) so as to allow it to absorb the stretching with toroidal shaping. In other words, it is not clear if the definition of fixing in a loose manner also encompasses the path of the conductor. It has not been read as requiring this but clarification of these issues is required, it being stressed that it is extremely important in the context of the present invention to be able to determine what is and is not a conductor fixed in a loose manner. For example, how is one to know what is and is not a loose connection, it being noted that at least before curing, almost any wire element can be stripped from a green rubber support – is this sufficient to make it a loose connection. While applicant may in reality be referencing the loose fixing in the context of allowing the conductor to reorient from a zigzag path to a straightened path, the claim provide no clear requirements in this

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regard, making this requirement for fixing in a loose manner still indefinite and confusing.

In claim 16, it is still not entirely clear what is meant by "linking of the free ends of the preform" and how this fits into known tire building, applicant's response to this rejection still presenting confusion – note the preceding rejection paragraph. While it could conceivably be argued that this is simply splicing the ends of the wound sheet, from applicant's response, it seems clear that something else (and in fact something other than what is done to a typical tire carcass ply when wound on a cylindrical drum) is intended. Clarification is required.

4. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack et al. (US 5,181,975) as applied in the last office action.
5. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by DE 2524463 to Breuer as applied in the last office action.
6. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann (US 5,479,171) as applied in the last office action.
7. Claims 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuermann (US 5,479,171) taken in view of WO 90/12474 to Malmer et al. as applied in the last office action.
8. Applicant's arguments filed June 6, 2003 have been fully considered but they are not persuasive, at least as regards the remaining rejections.

In particular, upon reconsideration in light of applicant's response, the 35 USC 112, first paragraph enablement rejection with respect to overcasting/tacking has been

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withdrawn, it being agreed that read as a whole, the artisan would have understood and been able to practice the invention in the manner argued by applicant.

The 35 USC 112, first paragraph rejection with respect to what is meant by fastening the free ends has however been maintained at least until the record is adequately clarified as noted in the rejection statement above.

With respect to any remaining 35 USC 112 second paragraph rejections, note the statement of rejection for a response to specific arguments in this regard.

The 35 USC 112, first paragraph description/new matter rejection has been withdrawn in light of applicant's response.

As to the art rejections, with respect to Pollack et al., it is argued that this reference would not teach a conductor fixed in a loose manner and would not teach solving a problem in which the conductor would be stretched at the tire periphery. Importantly, however, claim 16 provides no indication that the conductor is stretched or that the loose fixing has anything to do with this and in fact, this claim does not even seem to indicate that the conductor is in the tire periphery/tread area. As such, it is not considered that applicant's arguments are commensurate with the scope of the present claims. Again, as noted in the last office action, because of the ambiguity in determining what is and is not "loose fixing" (it further being entirely reasonable that any fixing to a green (i.e. uncured) rubber can be described as necessarily relatively "loose"), as well as since some relative conductor movement is even contemplated by Pollack et al. (note esp. col. 10, lines 14-15), it is not unreasonable to consider this to meet the present claims.

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With respect to DE '463, it is argued that this reference does not disclose a short side of the rectangular general shape extending substantially over a width of the tire. This argument has been considered but is unpersuasive. Again, the conductors in the reference clearly extend around the periphery of the tire in the tread area (note the figures) and further in light of fig. 2a in particular, the loops are in the form of open rectangles that include portions (the short portions of the rectangle) *that extend in the width direction of the tire*. While the short portions of the rectangles do not extend over the *entire* width of the tire, the claims were not read as requiring this (note also the 112 rejection in this regard). It would seem that it is applicant's position that this language requires that the short side extends over more of the width of the tire than that shown in the reference. It however is not clear what claim requirement defines this. If this is the intent, then clarification of the claim language would seem necessary. In any event, applicant must identify exactly what the present claim language requires in terms of the extent of the short side (as well as all the other directions) so that the claim scope can be accurately determined and compared to the prior art. At present, however, it is not seen why the short side of the rectangle in DE '463 cannot be said to have a substantial extent in the width direction of the tire.

With respect to the rejection over Schuermann, it is argued that "regarding providing a complementary preform with conductors, there is no showing that in view of Schuermann one skilled in the art would have even appreciated the problems addressed by the claimed invention", it further being urged that this reference is directed to conductors near the rim and thus does not address the problem of how to place

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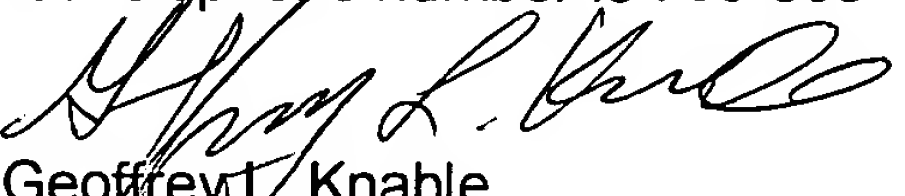
conductors to avoid stretching problems. Again, however *what* in e.g. claim 16 defines or requires that the conductor be located in e.g. the tread or that even stretching affects the conductor? Note again that simply referring to fixing in a loose manner alone is insufficient to define over normal fixing of a conductor within uncured rubber and also it is not clear what applicant is urging by referring to "complementary". This argument in fact necessitated a new 112, second paragraph issue with respect to the meaning of complementary – see the previous statement of rejection above.

With respect to the fact that tire reinforcing materials often reorient, it was not the examiner's contention that this would have motivated the artisan to deal with conductors necessarily in this manner. Rather, the examiner was simply pointing out that wires located in tires often do move during toroidal shaping – terming wires located in/adjacent uncured rubber material as loosely fixed is thus considered entirely reasonable.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
August 23, 2003